Overall dimensions: 19⅜"w × 7¾"d × 6"h

WOODARCHIVIST.COM

Gentleman's Valet Box

A container for personal effects

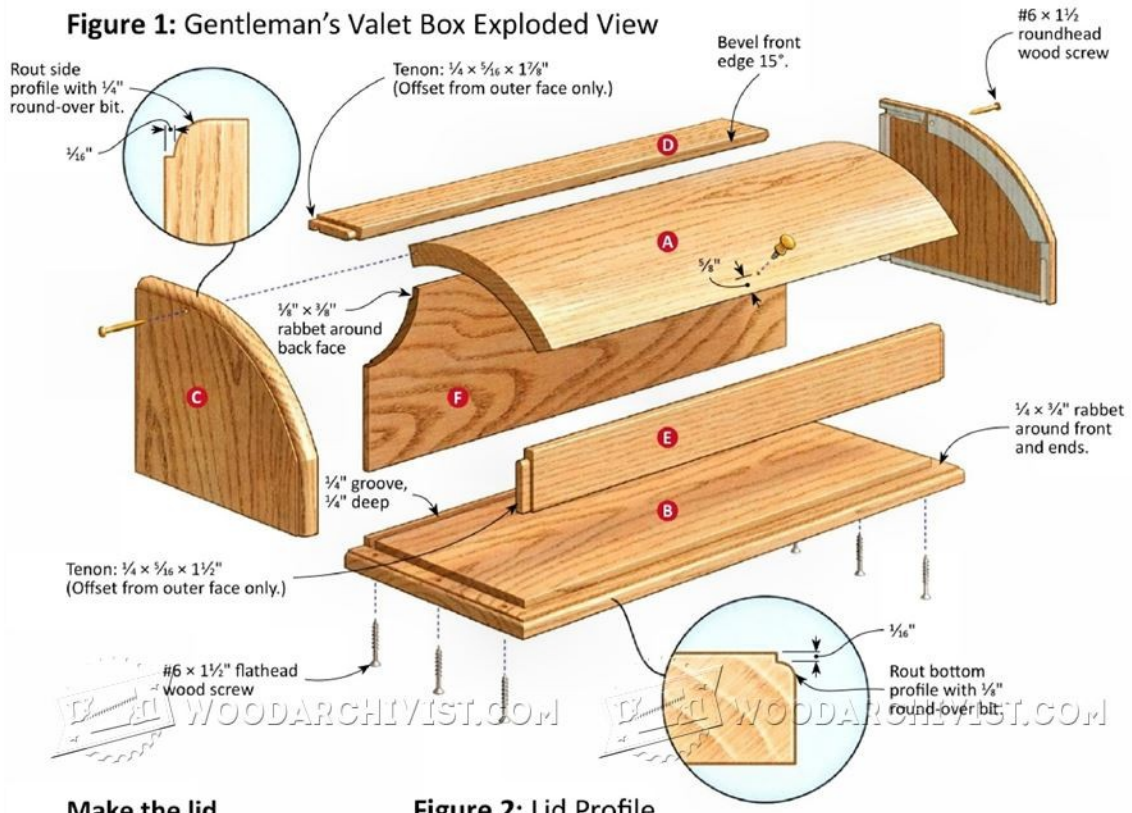
By Ken Burton

Original 1950s box that inspired this project.

The original version of this box belonged to my late father-in-law, Wilbur Rader. I suspect it came from a department store in Allentown, Pennsylvania, circa 1950. While my wife loves it for its sentimental value, it is not particularly well made. So when I set out to make copies for his three grandsons, I took a few liberties with the construction to make the new boxes more durable than the original, which was essentially just nailed together.

The star feature of this box is its curved lid. On the original it's a bent piece of plywood, but I made mine from solid 8/4 stock that I coved on the tablesaw. Cove-cutting on the tablesaw involves running your workpiece at an angle across the blade to create a curved cut. As explained in the article on page 28 , varying the angle of approach allows you to control the amount and shape of the curve. However, the setup for coving this box is dead simple. You need only to set up a pair of auxiliary parallel fences that are perpendicular to the blade–no other calculations are needed.

Figure 1: Gentleman's Valet Box Exploded View


Rout side profile with ¼" round-over bit.
1/16"
Tenon: ¼ × 5/16 × 1⅞" (Offset from outer face only.)
Bevel front edge 15°.
#6 × 1½ roundhead wood screw
D
A
5/8"
⅛" × ⅜" rabbet around back face
C
F
¼ × ¾" rabbet around and ends.
E
¾" groove, ¼" deep
B
Tenon: ¼ × 5/16 × 1½" (Offset from outer face only.)
1/16"
#6 × 1½" flathead wood screw
Rout bottom profile with ⅛" round-over bit.

WOODARCHIVIST.COM

Make the lid

1 Mill the stock for the lid (A) to the thickness and width given in the **Cut List**, but leave the piece 2" to 3" oversized in length for now.

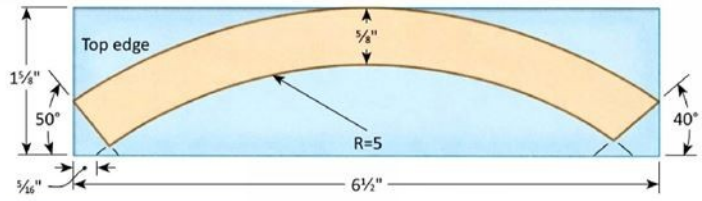
2 Lay out the cove on one end of the piece, as shown in **Figure 2**. Don't worry about getting the curve perfect; just be sure the ends and the center of the line hit the points indicated.

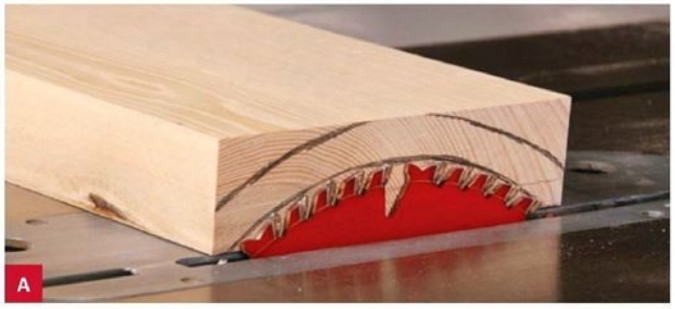
3 Place the workpiece on your tablesaw adjacent to the blade, and adjust the blade height to align with the layout lines for the underside of the lid (**Photo A**).

4 Make a couple of ¾"-thick wooden fences, about 6" wide, and at least long enough to span the width of your saw table. Make sure the edges are truly straight.

5 Clamp one of the fences to your saw table with its edge

Figure 2: Lid Profile





Raise your tablesaw blade to meet the inside curve of the profile you drew on the end of the lid stock.

Fastening auxiliary fences to a tablesaw can be tricky, and it may require screwing into the side extension table in lieu of clamping.

perpendicular to the blade and positioned 5/16" from the point where the rising blade teeth exit the rear of the blade slot. Clamp this rear fence in place, and then lower the blade beneath the table.

6 Place your workpiece against the rear fence. Then position a front fence against the opposite edge of the workpiece, and secure it to the table as well. Slide the workpiece between the fences to make sure it doesn't bind. Then fasten down the other end of the front fence, as shown in **Photo B**.

7 Raise the blade about 1/16" above the table. Standing to the left of the saw and slightly behind it, as shown in **Photo C**, push the workpiece forward between the two fences. The saw's rotation will push the piece against the front fence, with the rear fence providing added security.

As you feed the piece across the blade, listen carefully to the sound of the cut. It won't sound like a normal cut, but the blade shouldn't scream in protest either. Expect to hear a slightly deeper, more growling sound than usual. After a couple of passes, you should be able to hear when you are taking too deep a pass or feeding too quickly. A slow and steady feed rate creates the cleanest, most consistent surface.

8 After each pass, raise the blade another 1/16", and make another cut. Note that the deeper the cut gets, the more wood you're removing with each pass (**Photo D**). If the sound and feel of the operation indicate that the cut may be too aggressive, back the blade off a bit. Continue in this manner until the cut touches your layout line at the center of the board. You may find that making a very shallow cut as a final pass leaves you with a cleaner surface to sand.

9 To remove saw marks, start with gooseneck scraper, and then finish off with sandpaper. As shown in **Photo E**, it's easy to make a curved sanding block that complements the shape of your cove.

10 Draw a curved line on the unmarked end of your workpiece to indicate the top face of the lid. To draw this curve, I hold the pencil in such a way as to allow my middle

WOODARCHIVIST.COM

Feed the workpiece across the blade slowly and steadily. For safety, be sure to bring a pushstick into play near the trailing end of the cut.

As the cove deepens, you will be removing more material with each pass. Consider taking shallower cuts as you progress.

To create a sanding block that perfectly matches your lid, tape a piece of coarse sandpaper to the cove, and use it to shape your block.

Clamping the workpiece to a plywood carrier board provides solid footing for ripping away the majority of waste on the outer face of the lid.

finger to serve as sort of a marking gauge fence along the coved surface. You can also use a compass, running the pointer along the inside edge of the cove. Trim the end you originally marked (to remove the original layout) and remark it as you did the opposite end.

11 To trim the top face of the lid, first make a ¾"-thick plywood carrier board that's at least as wide and long as your workpiece. Then clamp it against the coved side of the workpiece with the clamps along one long edge and the opposite edges flush to each other.

12 Tilt your tablesaw blade to 75° (indicated as 15° on the saw's bevel gauge). Referring to the curved lines on the ends, adjust the rip fence so that the blade cuts to the outside of the lid's final profile. Then feed the carrier board and workpiece on edge to remove the bulk of the waste outside the convex portion of the curve, as shown in **Photo F**. (If your saw tilts to the right, move the fence to the left of the blade.)

13 Smooth the convex face of the lid using a hand plane, scrapers, and sandpaper.

Make the box

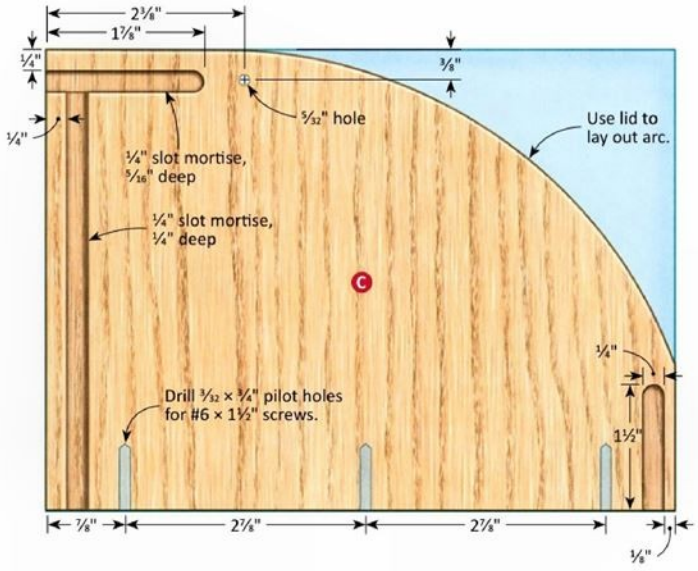
1 Mill the bottom (B), sides (C), top (D), front (E), and back (F) to the sizes shown in the **Cut List**.

2 Referring to **Figure 3**, lay out the slot mortises for the top (D) and front (E). Be sure to make a left and a right side. Then, using a ¼" straight bit in your table-mounted router, rout two ¼"-wide by 5/16"-deep slot mortises in each of the sides (C) to the lengths shown in **Figure 3**.

3 Swap the ¼" bit for a 1"-diameter straight bit, and rout a ¾" rabbet, ¼" deep across both ends and the front edge of the bottom (B). Leave the bit set up until after you cut the tenons on the front

WOODSMITHPLANS.COM

Figure 3: Side joint layout



Saw the offset tenons on the top and front pieces, guiding the workpiece with a miter gauge and using the rip fence as a stop.

Saw the upper edge of the lid after setting the rip fence so that the cut intersects the junction of the straight side and the curved top surface.

(E) and back (F), as described in the next two steps.

4 Adjust the blade on your tablesaw to cut just shy of ⅛" deep for cutting the tenons on the ends of the top (D) and front (E).

5 With its outer face against the saw table, guide the top (D) across the blade with the miter gauge, using the rip fence as a stop (**Photo G**). Then remove the waste in additional passes. Repeat with the other end, and then check the shoulder-to-shoulder dimension. It should match the shoulder-to-shoulder dimension on the bottom (B). If the dimension on the top (D) is too long, bump the fence away from the blade a little. (If the top is too short, move the fence on the router table away from the bit slightly and recut the bottom rabbet.) Then cut the tenons on the front (E) with the same setup. Cut the stub tenons a bit too thick, and then fine-tune the fit with a shoulder plane.

6 Tilt your tablesaw blade to 75° (indicated as 15° on your saw's bevel gauge), and bevel the front edge of the top (D). Then trim the tenons to width using a small crosscut saw and chisel.

7 With your table-mounted router, cut ¼" grooves, ¼" deep, along the inside faces at the rear of the top (D), bottom (B), and the two sides (C) to hold the back (F), where shown in **Figure 3**.

8 Mill the wood for the back (F) to the size shown in the **Cut List**. Rout a ⅛"-deep by ⅜"-wide rabbet around all four edges of the rear face to create a ¼"-thick tongue that fits in the grooves you routed in the bottom (B), sides (C), and top (D). (Note: The back rabbet extends ⅛" beyond the depth of the groove.)

9 Dry-clamp the box together.

COPYRIGHTED MATERIAL FROM WOODARCHIVIST.COM

Fit the lid

1 Fasten the lid (A) to a straight length of scrap that is approximately 1⅜" thick, 3½" wide, and 24" long, using a screw near each end. Center the lid on the scrap so that it sits level. Predrill the holes and install screws, tightening them judiciously by hand to prevent splitting the lid.

2 Tilt your tablesaw blade to 50° (indicated as 40° on your saw's bevel gauge), and bevel the top edge of the lid, as shown in **Photo H**.

3 Tilt the blade to 45°, and cut the lower edge of the lid in the same manner. Note that this isn't the final angle, which is more acute than can be easily cut on the tablesaw. However, this cut gets you in the ballpark while removing most of the waste. Then, referring to **Figure 2**, draw the final angle on each end, and use a straightedge to connect the

With the top edge of the lid clamped down, plane to the lines drawn on the front edge, which should be just about parallel to the benchtop.

lines along the length of the lid. Clamp the lid to your bench, and hand-plane the edge (**Photo I.**)

4 Crosscut the lid to length, guiding it across the tablesaw with the miter gauge. Be sure to cut away both screw holes in the process.

5 Hold the lid (A) in place against the box, using scrap to support the lid's upper end so it sits flush with the box top (D). Then trace the lid's curves onto the sides (C), as shown in **Photo J.**

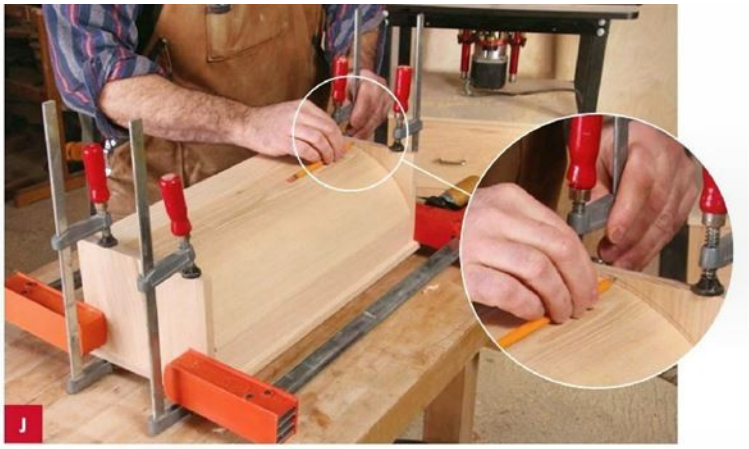
6 Bandsaw the sides (C) to shape, sawing a bit proud of the cut lines. Then sand the edges to fair the curves and remove the saw marks.

7 Drill a 5/32"-diameter hole in each side (C) at the pivot points, shown in **Figure 3**. Also drill three 3/16"-diameter counterbored clearance holes in both ends of the bottom (B) for the screws that attach the sides, spacing them as shown in **Figure 3**.

8 Rout the outside edges of the sides (C) using a 1/4" round-over bit in your table-mounted router. Make the cut deep enough to create a 1/16"-high shoulder, as shown in the detail of **Figure 1**. Also rout the ends and front edge of the bottom (B) with a 1/8" round-over bit set deep enough to leave a 1/16" shoulder.

About Our Designer/Builder

Ken Burton has been working with wood for more than 30 years and writing about it nearly as long. Check out his website at *www.wrwoodworks.com*. You can take classes with Ken this summer at Peters Valley Craft Center in Layton, New Jersey.



J

Transfer the lid's curve to the box sides using a standard pencil, which creates the proper 1/8" offset by default.

9 Glue, clamp, and screw the box together.

10 Set the lid (A) in place, using the same scrap piece as before to hold it in position. Using the 5/32"-diameter holes you drilled in the sides (C) as guides, drill a 3/32"-diameter pilot hole in each edge of the lid to accept a #6 x 1½" roundhead screw. Then drive these pivot screws in by hand, and test the action of the lid. If it binds, you can adjust the bevel on its top edge using a hand plane.

11 Apply a finish with the lid removed. The box shown here was stained with a dark red mahogany stain and then topped off with several coats of spray shellac. Add a knob and reinstall the lid before loading your treasures inside. ■

woodworkersjournal.com

Gentleman's Valet Box Cut List

	Part	Thickness	Width	Length	Qty.	Mat'l
A*	Lid	1⅛"	6½"	17⅞"	1	A
B	Bottom	¾"	7⅛"	19⅜"	1	A
C	Sides	9/16"	7½"	5½"	2	A
D	Top	⅜"	2⅛"	18½"	1	A
E	Front	⅜"	1¾"	18½"	1	A
F	Back	⅜"	5⅛"	18⅜"	1	A

*Indicates that parts are initially cut oversized.
Materials: A=Ash
Hardware: (6) #6 x 1½" flathead wood screws
(2) #6 x 1½" roundhead woodscrews (brass)

Convenience-*PLUS* BUYING GUIDE

☐1.	Freud Double Flute Straight Bit, ½" SH, ¼" D, ⅞" CL	#835495	$19.97
☐2.	Freud Double Flute Straight Bit, ½" SH, 1" D, 1¼" CL	#828675	$27.97
☐3.	Freud ¼" Roundover Router Bit	#815157	$35.97
☐4.	Freud ⅛" Roundover Router Bit	#828854	$32.47
☐5.	½" dia. Brass Knob	#02U22	$6.50

Above items are available at Woodcraft stores, *woodcraft.com* or by calling (800) 225-1153.
Prices subject to change without notice.